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EXAMINER	
ALIA, CURTIS A	

ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPOPS.LEGAL@agilent.com

Office Action Summary	Application No.	Applicant(s)	
	10/791,117	WARD, ROBERT GEOFFREY	
	Examiner	Art Unit	
	Curtis A. Alia	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 13 March 2009 has been entered. Claims 1, 9 and 17 have been amended. Claims 1-24 are still pending in this application, with claims 1, 9 and 17 being independent.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

3. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. Claims 1-2, 9-10, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlsson et al. (newly cited US 7,269,175) in view of the background of Takada et al. (newly cited US 6,850,520) and Lee (newly cited US 2003/0088685).

Regarding claim 1, Karlsson discloses a system comprising a circular buffer for storing ATM data (see figure 4, SAR channel FIFOs, FIFOs are easily interchangeable with circular buffers where the head and tail are linked), the ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at

least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 11, lines 56-58, channel identifier in AAL packet), and a content addressable memory configured to receive any of the VPI, VCI and CID information related to each ATM cell and configured to provide an index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations, the index placed in the circular buffer and used to determine an AAL mode of each ATM cell (see figure 5 and column 11, line 56 to column 12, line 18, the channel identifier (CID) is used to find the entry in the look up table, the entry having an index showing as active, so that the AAL packet can be forwarded to the FIFOs).

Karlsson does not explicitly teach a plurality of parallel processing elements configured to analyze the ATM cells and determine a cell type.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches a plurality of parallel processing elements (see column 2, lines 32-45, parallel processing of ATM cells) configured to analyze the ATM cells and determine a cell type (see column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the system of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson and Takada do not explicitly teach that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the system of Karlsson and Takada, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson and Takada as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 2, Karlsson does not explicitly teach that the circular buffer communicates with the plurality of parallel processing elements simultaneously.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches that the circular buffer communicates with the plurality of parallel processing elements simultaneously (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the method of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the

time of the invention to modify the method of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Regarding claim 9, Karlsson discloses a method comprising providing ATM data to a circular buffer (see figure 4, SAR channel FIFOs, FIFOs are easily interchangeable with circular buffers where the head and tail are linked), the ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 11, lines 56-58, channel identifier in AAL packet), and receiving in a content addressable memory any of the VPI, VCI and CID information related to each ATM cell (see figure 5, look up table 580 holds VPI, VCI and CID data on the ATM cells), storing the ATM data in the circular buffer (see figure 4, data supplied to buffer from look up table and host), providing an index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations, the index placed in the circular buffer and used to determine an AAL mode of each ATM cell (see figure 5 and column 11, line 56 to column 12, line 18, the channel identifier (CID) is used to find the entry in the look up table, the entry having an index showing as active, so that the AAL packet can be forwarded to the FIFOs).

Karlsson does not explicitly teach analyzing the ATM cells and determine a cell type.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches analyzing the ATM cells and determine a cell type (see

column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the method of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson and Takada do not explicitly teach that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the method of Karlsson and Takada, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson and Takada as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 10, Karlsson does not explicitly teach simultaneously communicating between the circular buffer and the plurality of parallel processing elements.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the method of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Regarding claim 17, Karlsson discloses a computer readable medium (see column 7, lines 1+, firmware is stored in a computer readable medium (i.e., EEPROM)) comprising logic for providing ATM data to a circular buffer (see figure 4, SAR channel FIFOs, FIFOs are easily interchangeable with circular buffers where the head and tail are linked), the ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 11, lines 56-58, channel identifier in AAL packet), logic for receiving in a content addressable memory any of the VPI, VCI and CID information related to each ATM cell (see figure 5, look up table 580 holds VPI, VCI and CID data on the ATM cells), logic for storing the ATM data in the circular buffer (see figure 4, data supplied to buffer from look up table and host), logic for providing an

index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations, the index placed in the circular buffer and used to determine an AAL mode of each ATM cell (see figure 5 and column 11, line 56 to column 12, line 18, the channel identifier (CID) is used to find the entry in the look up table, the entry having an index showing as active, so that the AAL packet can be forwarded to the FIFOs).

Karlsson does not explicitly teach logic for analyzing the ATM cells and determine a cell type.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches logic for analyzing the ATM cells and determine a cell type (see column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the computer readable medium of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson and Takada do not explicitly teach that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Lee. In particular, Lee teaches that the ATM adaptation layer 2 cells and AAL 5 cells are reassembled in real time (see abstract and paragraph 21, AAL2 and AAL5 traffic are processed in such a way as to maintain the quality of service required by voice data, that data being real-

time data, thus having to process the AAL2 and AAL5 cells in real-time to maintain that quality of service).

In view of the above, having the computer readable medium of Karlsson and Takada, then given the well-established teaching of Lee, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson and Takada as taught by Lee, since Lee stated in paragraph 16 that maintaining distinction between real-time data and non-real-time data will increase QoS performance and link failure can be actively dealt with.

Regarding claim 18, Karlsson does not explicitly teach logic for simultaneously communicating between the circular buffer and the plurality of parallel processing elements.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches logic for simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the computer readable medium of Karlsson, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

5. Claims 3-4, 11-12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlsson in view of Takada and Lee as applied to claims 2, 10 and 18 above, and further in view of Suzuki et al. (previously cited US 6,687,250).

Regarding claim 3, Karlsson, Takada and Lee do not explicitly teach a fragmentation table configured to receive and store data fragments associated with an ATM cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a fragmentation table configured to receive and store data fragments associated with an ATM cell (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the system of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 4, Karlsson, Takada and Lee do not explicitly teach a buffer manager configured to accumulate the data fragments and assemble the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a buffer manager configured to accumulate the data

fragments and assemble the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the system of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 11, Karlsson, Takada and Lee do not explicitly teach receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches receiving and storing data fragments associated with an ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the method of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 12, Karlsson, Takada and Lee do not explicitly teach accumulating the data fragments in a buffer manager and assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches accumulating the data fragments in a buffer manager and assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the method of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 19, Karlsson, Takada and Lee do not explicitly teach logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the computer readable medium of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 20, Karlsson, Takada and Lee do not explicitly teach logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the computer readable medium of Karlsson, Takada and Lee, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson, Takada and Lee as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

6. Claims 5-8, 13-16 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlsson in view of Takada, Lee and Suzuki as applied to claims 4, 12 and 20 above, and further in view of VanDervort et al. (previously cited US 5,761,191).

Regarding claims 5, Karlsson, Takada, Lee and Suzuki do not explicitly teach a statistics memory configured to store statistics associated with the cells.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches a statistics memory configured to store statistics associated with the cells (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 6, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell

if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 7, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that

measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 8, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 13, Karlsson, Takada, Lee and Suzuki do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a statistics memory (see column 13, lines 40-51, test processor includes means for recording

occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 14, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information,

AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 15, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 16, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 21, Karlsson, Takada, Lee and Suzuki do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a statistics memory (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 22, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 23, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored)

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 24, Karlsson, Takada, Lee and Suzuki do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches hat the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Takada, Lee and Suzuki, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Takada, Lee and Suzuki as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis A. Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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5/20/2009

CAA